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PANASONIC ANNOUNCES HC-X1500, HC-X2000 and AC-CX10, THE INDUSTRY'S SMALLEST AND LIGHTEST*1 4K 60P PROFESSIONAL CAMCORDERS WITH A WIDE-ANGLE 25MM*2 LENS AND 24X OPTICAL ZOOM

Las Vegas (January 6, 2020) - Panasonic is proud to announce 3 of the industry's smallest and lightest 4K 60p camcorders. Not limited by their compact and lightweight designs, the HC-X1500, HC-X2000 and AC-CX10 offer a high standard of on-site mobility and portability, as well as the high-quality 4K 60p recording capability demanded by professionals. The Wide-Angle 25mm Lens and 32x i.ZOOM (4K recording) achieve high-spec optical performance thanks to Panasonic's exclusive high-precision AF, which also provides high-speed, accurate focusing for both 4K and Full-HD shooting. The new models have a variety of professional functions, such as Two Manual Rings, an ND Filter, a Built-in LED Video Light*3, and 24-bit High Resolution Linear PCM Audio Recording. Users can further customize the recording formats according to the shooting environment or preference.

The HC-X1500, HC-X2000 and AC-CX10 all support 4:2:2 10bit Internal Recording*4 and the new, high-efficiency HEVC codec, and built-in Wi-Fi supports HD Live Streaming without additional equipment.

In addition, the AG-CX10 supports the broadcaster-targeted P2 MXF File Format. Ethernet HD Live Streaming and an NDI|HX^{*5} compatible IP connection function are equipped, and connectivity is provided for use as a live camera.

- *1 For a camcorder with an integrated lens capable of 4K 60p recording (as of January 6th, 2020. Panasonic research).
- *2 35mm camera equivalent.
- *3 Except the HC-X1500.
- *4 Up to 4K30p.
- *5 Requires license purchase

Precise Optical Performance

The 4-Drive Lens System controls the lens groups independently. This integrated lens offers a remarkably powerful optical 24x zoom that ranges from 25mm* wide angle to 600mm* tele. i.ZOOM achieves 32x at 4K resolution, and 48x at FHD.

Equipped with a LEICA Dicomar Lens world-renowned for its high standards of lens resolution, contrast, and quality, the camcorders produce stunningly beautiful images while suppressing flaring and ghosts. Two Manual Rings are provided, one for focusing and the other for zoom or iris operation. The Manual Rings are different sizes, so the appropriate ring be accurately identified by touch. ND Filters can be selected from 1/4, 1/16, 1/64, and Clear, while glass is newly used as a countermeasure against scorching from sunlight condensation.

* 35mm camera equivalent.

High-speed, High-precision AF Including Face Detection AF/AE

Face Detection AF/AE provides precise focusing and sufficient exposure for subjects, and together with the precise focus lens drive achieves superior focusing speed, stability and

tracking performance for both 4K and Full-HD. In addition, subject tracking with color recognition can be activated on the LCD panel.

5-Axis Hybrid O.I.S.

For both UHD and FHD modes, in addition to O.I.S. (Optical Image Stabilization), Electronic Image Stabilization operates to detect and correct handshake in 5 axes, including rotational blurring. The Ball O.I.S. System reduces friction on the drive section, achieving delicate correction even for small-amplitude handshake. This produces beautiful images with suppressed handshake even at high, 24x optical zoom.

Industry's Smallest and Lightest Camcorder

A newly developed fan is at the center of Panasonic's new heat-dispersing design, creating the industry's smallest and lightest camcorder with integrated lens capable of 4K 60p recording. By borrowing air from the rear panel of the camera and efficiently dispersing heat from the front panel, reliable, extended shooting is achieved.

High-Quality, Versatile Recording

The Venus Engine, found in almost all of Panasonic's LUMIX cameras, is also incorporated in these camcorders. This enabled 4:2:2 10-bit internal recording with maximum 29.97p in UHD, and maximum 59.94p in FHD.

When set for 10-bit recording, the camcorder delivers 4K 60p 4:2:2 10-bit HDMI output, enabling high image quality capture with an external recorder. New, highly efficient HEVC recording (LongGOP/10-bit 4:2:0/MOV) is also supported for recording 59.94p at a high bit rate of 200 Mbps. As for file formats, in addition to MOV, MP4, and AVCHD, the AG-CX10 also supports the ideal P2 MXF for the editing system for broadcast stations, and recording by the AVC-Intra/AVC-LongG codecs is supported.

AVC-Intra100/50 codec support is planned for the future. Recording by all P2 formats requires a microP2 card.

Super Slow-Motion Recording

FHD mode enables slow-motion recording at 120 fps (for 59.94 Hz)/100 fps (for 50 Hz). 10-bit recording is supported, and full-frame images with the image area uncropped are obtained even at high frame rates. Additionally, auto focus can be used in this mode.

Professional Functionality and Design

- A bright video light is built into the handle*1 and can be adjusted between 30% to 100% using the dimmer dial. IR lights*2 are supported for IR (Infrared) Shooting for shooting in dark conditions.
- The 3.5-inch monitor has 2,760K-dots of resolution, making it approximately 2x brighter and having approximately 2x the number of dots compared to a conventional monitor*³. It provides higher legibility even under bright sunlight.
- An electrostatic touch panel improves the operating ease of selecting menu items.
- Since the 1,555K-dot tiltable viewfinder and LCD output simultaneously, the image being recorded can also be confirmed in the LCD monitor while viewing it on the EVF.
- Focus Assist functions including Expand, Peaking and One-push AF are included to support fast, accurate manual focusing.
- The included battery is unobtrusive when attached and enables approximately 4.5 hours of continual operation.
- *1 The optional handle unit (VW-HU1) is required for HC-X1500.
- *2 Recommended: 850-nm wavelength light
- *3 HC-X1000

Double SD Card Slot

Two SD memory card slots are provided and with unlimited Relay Recording, the device switches automatically and seamlessly from Slot 1 to Slot 2. * Simultaneous Recording or Background Recording is also selectable to match the workflow and card necessity.

Maximum file size that can be recorded over multiple SD cards is 96 GB. Recording will not stop even when the data size exceeds 96 GB.

48-kHz/24-bit High Resolution Linear PCM Audio Recording

+48V Phantom Power Supply/MIC/LINE Selectable XLR Audio Input with Manual Volume is equipped for each of 2 channels. Also supported is a 24-bit linear PCM system (MOV/P2 MXF*1), 16-bit AAC (MP4), or Dolby Audio system (AVCHD) high-quality 2-channel audio recording. The optional handle unit (VW-HU1) is required for HC-X1500. *1 AG-CX10 only

Versatile Network Functions

A Wi-Fi module is built-in, so there is no need for a separate wireless LAN module, and Wi-Fi connection is possible without additional equipment. Using a tablet application HC ROP, wireless remote control, including camera settings and lens control, can be set. RTSP/RTP/RTMP/RTMPS-Compatible HD Streaming allows direct connection and streaming over Facebook, YouTube, etc., of concerts, sports events, and news flashes. In addition, the AG-CX10 has an NDIJHX mode, so an external converter is not needed for data transmission and camera control via IP connection.

Other Network Features:

- 3G-SDI for connecting to an external recorder (AG-CX10, HC-X2000)
- USB (micro AB) to LAN Conversion Adaptor* Included (AG-CX10) USB micro AB-Host Cable (included) is necessary for the connection.
- Compatibility with wired remote controls via the remote terminal.

Optional Handle Unit

An optional Handle Unit (VW-HU1) is easily detached and equipped with a 2-channel XLR Audio Input, audio control, and LED light. Operation of the zoom lever attached to the Handle Unit maintains a constant zoom speed, which can be set in 7 steps from the menu.

All three camcorders will be available in late March 2020.

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About Panasonic Consumer Electronics Company

Based in Newark, NJ, Panasonic Consumer Electronics Company is a division of Panasonic Corporation of North America, the principal North American subsidiary of Panasonic Corporation. The company offers a wide range of consumer solutions in the U.S. including LUMIX Digital Cameras, Camcorders, Blu-ray players, Home Audio, Technics, Cordless Phones, Home Appliances, Beauty, Grooming, Wellness and Personal Care products and more. One of Interbrand's Top 100 Best Global Brands of 2018, Panasonic is a leading technology partner and integrator to consumers, businesses and government agencies across the region.

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